

ABSTRACT OF THE DISCLOSURE

A method of correcting laser beam intensity, a laser beam intensity correction mechanism and a multi-branched laser oscillation device having the correction mechanism 5 to adjust the laser beam intensity easily and smoothly, are provided.

A laser beam oscillation device includes a laser oscillator 7, a reflection mirror 8, beam splitters 9a and 9b and a reflection mirror 9c leading the laser beam to 10 optical paths 1 to 3, laser beam intensity correction mechanisms 10 correcting the laser beam intensity in each optical path, and optical systems 11. Each of the laser beam intensity correction mechanisms 10 includes a rotating portion 10d rotating around an optical axis of the laser beam by moving a lever in the case, and an optical substrate 10b slantly fixed to a rotating portion in a manner that an incident angle of the laser beam thereto is set at a Brewster's angle. The optical substrate 10b is rotated around the optical axis while maintaining the Brewster's 20 angle. Subsequently, polarizing operation adjusts transmission intensity of the laser beam such that the laser beam intensity in each optical path becomes equal to each other.